I. PROJECT TITLE AND PROJECT PURPOSE STATEMENT

Title: Scientific Research (SR1) is a non-profit 501(c)3 organization that continuously strives to be a leader in eliminating disparities in education, health, and technology through science and partnerships. SR1 is proposing to implement the Community Oriented Opportunities for Learning (COOL) Local Environmental and Public Health (LEAPH) Project. The COOL LEAPH project will empower project participants to utilize community mobilization and advocacy skills to bring both human and non-human resources together to undertake developmental activities in order to address environmental and public health issues.

Summary Description: The COOL LEAPH Project will address the environmental statues (1) Clean Water Act: Section 104(b). SR1 proposes to implement the COOL LEAPH Project with economically disadvantaged minority student and adult community members (African Americans, Hispanics, females) residing in Jackson, MS. The proposed COOL LEAPH Project is based on SR1's proven, independently evaluated, and holistic community-centered model. The model's goal is to deliver a pipeline of services that (1) reaches many residents in order to affect the culture of a community; (2) transforms the physical and social environments that impact the community's development; and (3) creates programs at a large scale in order to meet the local need. The end result of the COOL LEAPH Project is to be part of the accessible programs that are linked to one another in order to provide uninterrupted support for healthy community growth, engagement, and sustainability. **Project Location:** The COOL LEAPH Project will target economically disadvantaged residents in Jackson, MS 39284. **Related Environmental Statues:** The project will address the environmental statues (1) Clean Water Act: Section 104(b) (2). The COOL LEAPH Project will empower economically disadvantaged residents in Jackson, MS 39284 to develop and sustain the skills needed to (1) mobilize the community to actively participate in addressing environmental health and public health issues associated with the Clean Water Act violations; and (2) identify, understand, and address environmental short term and long term health hazards associated with the Clean Water Act. **List Project Partners**: SR1 will partner with the Mississippi Sudden Infant Death Alliance, Millsaps College, and Symbiosis Investments.

The COOL LEAPH Project will empower and build the capacity of economically disadvantaged minority community members in Jackson, MS, to actively alleviate existing environmental and public health hazards and prevent future environmental and public health hazards.

II. ENVIROMENTAL AND PUBLIC HEALTH INFORMATION ABOUT THE AFFECTED COMMUNITY

Local Environmental and Public Health Issues: SR1 seeks to address the ongoing environmental and public health hazard (bacteria, viruses, parasites, and fungi) violations of the Clean Water Act associated with the City of Jackson, MS, Savannah Street Wastewater Treatment Plant (WWTP)**.** Of the 3 WWTPs in the city of Jackson–the Savannah Street Wastewater Treatment Plant, Presidential Hills Treatment Plant, and

Trahon/Big Creek Wastewater Treatment Plant–Savannah Street WWTP serves the largest population.

The Savannah Street WWTP serves a total population of 22,919, 80% of which are economically disadvantaged minorities (Census, 2013). Since October of 2011, there have been 1,714 sewer overflows, with 311 million total gallons of sewage spilling in yards, streets, and ditches. In the past 2 years, the City of Jackson has sent 6 billion gallons of largely untreated sewage to the Pearl River from the Savannah Street WWTP (Clarion Ledger, January 2014).

Characteristics of Jackson, MS: The target population for COOL LEAPH Project is economically disadvantaged minority community members residing in Jackson, MS. The city has a total area of 106.8 square miles (277 km^2)—104.9 square miles (272 km^2) of land and 1.9 square miles (4.9 km^2 or 1.80% of the total) of water. Jackson is Mississippi's state capital and largest city with a per capita income of $18,876 and total population of 184,255—79.4% Black and 53.5% female. Current statistics show that 28.3% of residents live below the poverty level, which can be attributed to the low number of citizens holding college degrees (16.9%) and the high school dropout rate (36.2%). Over 97% of K-12 students receive free or reduced lunch. According to CQ Press, Jackson, MS, is ranked the 8th most dangerous US city. Contributing factors include low education-adjusted wages, high pre-teen and teen pregnancy rates, and high STD rates. Also, Jackson's violent crime rates are higher at 73% than the Mississippi average of 29% (CQ Press, 2013).

Comparison City- Madison, MS: The comparison population for COOL LEAPH Project is the neighboring city of Madison, MS. Madison has a per capital income of $41,595 and 85.5% of residents are Caucasian. 63.1 % of residents have obtained a bachelor's degree or higher (Census 2014). Only 4.7% of families live below the poverty level (Census 2014). Madison, MS, is ranked as the 2nd most desired livable city in Mississippi by AreaVibes Liability Score and a best place to live by CNN/Money. In 2012, the city of Madison did not have any violations with their WWTP and no boil water notices were issued in 2013 (Madison Water Quality Report, 2013). Approximately 15% of K-12 students receive free or reduced lunch.

Disproportionately Impacted: On November 21, 2012, the Environmental Protection Agency, United States Department of Justice, and the Mississippi Department of Environmental Quality reached a Clean Water Act settlement with the City of Jackson, with an estimated $400 million in repairs. Prior to the settlement, the City of Jackson, MS, violated Section 301 of the Clean Water Act and terms and conditions of its National Pollutant Discharge Elimination System (NPDES) permits. Jackson's alleged violations included over 2,300 sanitary sewer overflows in the past 5 years, prohibited bypasses, operation and maintenance failures, and effluent limit violations (EPA, 2012). Many of these issues are a result of aging infrastructure, with much of downtown Jackson's piping being installed prior to 1910. According to local water resource engineers, 112 miles of pipes in the downtown neighborhood need to be reconstructed. On average, Jackson has 1,500 pipe leaks per year which is 9 times the national average. Of the 3 wastewater

treatment plants in the city– the Savannah Street Wastewater Treatment Plant, Presidential Hills Treatment Plant, and Trahon/Big Creek Wastewater Treatment Plant– Savannah Street WWTP serves the largest population (22,919 total; 80% minority). Since October of 2011, there have been 1,714 sewer overflows, with 311 million total gallons of sewage spilling in yards, streets, and ditches. In the past 2 years, the City of Jackson has sent 6 billion gallons of largely untreated sewage to the Pearl River from the Savannah Street WWTP. The neighborhoods located within a 3 mile radius of this treatment plant have an average income lower than 89.6% of the rest of the United States. Moreover, the rate of child poverty within these neighborhoods is higher than 94.9% than the rest of the country. It is estimated that 9% (15,789) of the targeted population was exposed to water with contaminants exceeding the limits (as determined by EPA standards). in the year 2013. EPA has provided the City of Jackson 18 years to make the necessary improvements, with the majority of the work needing to be completed in the first 11 years in order to alleviate the burden of direct raw sewage on the low-income populations of Jackson, MS. The environmental and public health effects that are suspected to plague Jackson's low-income residents due to the overflow of raw sewage are as follows: (1) High Total Suspended Solids (TSS) that can diminish the amount of light that penetrates the water column and reduce photosynthesis and the production of oxygen, (2) High Biological Oxygen Demand (BOD), which indicates an abundance of biologically degradable material that will consume oxygen and may take away oxygen that is needed for aquatic organisms to survive, and (3) Excess levels of nitrogen and phosphorus in waters, which can produce harmful algal blooms. These blooms contribute to the creation of hypoxia or "dead zones" in water bodies, where dissolved oxygen levels are so low that most aquatic life cannot survive.

Benefit of Project-- Community Change: The COOL LEAPH Project will empower and build the capacity of low income minority community members in Jackson, MS, to actively alleviate existing environmental and public health hazards and prevent future environmental and public health hazards. The project will provide the community members the skills, strategies, and education to engage vigorous, collaborative partnerships among local educational agencies, higher education representatives, policy makers and opinion leaders, local, state, and federal governments, professional groups, religious groups, businesses, and individual community members.

III. ORGANIZATION'S HISTORICAL CONNECTION TO THE AFFECTED COMMUNITY

History of Organization's Involvement with the Community: Scientific Research (SR1) was founded in 2005 and incorporated in 2007. SR1 has grown from a small organization of 2 personnel coordinating 1 grant program, to a network that involves over 20 different partnering agencies working together toward different cooperative agreements with state, local, and private funding support.

SR1 has a great history of developing and promoting evidenced-based educational projects, programs, and activities for residents of Jackson, MS, by collaborating with students, local education agencies, parents/guardians, community leaders, non-profit organizations, and local colleges and universities. SR1 is well known for its community

outreach efforts and educational enrichment opportunities. The current projects SR1 has undertaken are specifically geared toward improving the cradle-to-college continuum of economically disadvantaged minority students (which includes females, African Americans, and Hispanics), their families, and communities by providing access to education, health, and technology.

SR1 was founded and became involved in the Jackson, MS, community due to SR1's founder, Mr. Green. Mr. Green, a Mississippi native, understands first-hand the many factors resulting from lack of health, education, and technology knowledge and access that plagues Mississippi. SR1 has demonstrated success in providing age appropriate, culturally competent, and evidence based educational and health projects. Since 2002, SR1 has conducted community focused educational programs that facilitate discussion and the exchange of ideas on education, health, social behavior and change. Programs and projects have provided both direct and indirect services to children, parents/guardians, local educational agencies, (i.e. Jackson Public School District) and community members residing in Jackson, MS. SR1 became involved with the Jackson, MS, community due to the historical and current education, health, and technology disparities that plague the residents. SR1 works with the residents to build their capacity to advocate for change.

Work with the Community: SR1 has a history of developing and promoting educational-based projects for Jackson, MS, residents by collaborating with schools, parents/guardians, community leaders, non-profit organizations, the Mississippi Department of Education, and the Mississippi State Department of Health. SR1 has provided services via community outreach efforts and education through facilitation of evidence-based interventions and the development of evidenced-based curriculums. SR1 is well known throughout the Jackson, MS, community and enjoys an excellent reputation for its cultural component and result-oriented programming. SR1 operates a community learning center, where community members are able to come together to discuss community issues, utilize desktop and laptop computers to research information, and complete educational assignments. The projects SR1 has undertaken are specific to improving the health status and health education of students, their families, and communities.

SR1's 4 most current relevant projects are devoted to community capacity to use data for the benefit of the community, including project-specific modifications for improvement: The **Community Oriented Opportunities for Learning (COOL) Jackson Project** is a $2.3 million-dollar innovative non-school hour science, technology, education, and mathematics (STEM) project that focuses on underrepresented, low-income minorities and students at risk of non-enrollment and/or non-completion in post-secondary education for the Mississippi Department of Education. The project incorporates environmental and public health education for the students, parents/guardians, and community members on topics such as asthma, mold, obesity, nutrition, Sudden Infant Death Syndrome, and childhood lead poisoning prevention. Students have also implemented a recycling program (paper and plastics) and are starting a compost garden. Additionally, students are learning methods to reduce air pollution through the use of the LEGO Renewable Energy Kit. The kit helps students understand how energy is

developed from the sun, wind, and water. Students will explore renewable energy sources, investigate the supply, transfer, accumulation, conversion, and consumption of energy, and analyze the data from hands-on activities and exciting, real-life models to describe and explain outcomes. The Renewable Solar Energy curriculum will provide students with research material, building instructions, and engaging lesson plans to power a model windmill, solar panel, and hydropower. 115 students are currently participating, and additional students are added each school year. This project was the first of its kind in the state of Mississippi, and the evaluation of the project highlights the high probability for replication and scalability.

The COOL Education Project provides economically disadvantaged students and their parents/guardians in Jackson, MS, Forest, MS and Madison, MS the opportunity to have 1-on-1 and small group tutoring and mentoring providing by 40 AmeriCorps members. The COOL Education Project is a non-school hour academic year and summer recess based program designed to assist economically disadvantaged students in grades K-12 with developing 21st century skills necessary for academic success, character-building, and dropout prevention through innovative tutoring, mentoring, and enrichment activities. The COOL Education Project gives students enhanced, comprehensive learning until they achieve college access and success.

The Go! Wild In Nature (WIN) Project provides economically disadvantaged minority students and their parents/guardians in Jackson, MS, the opportunity to gain hands-on experience as well as knowledge of Mississippi's environmental ecosystem through Mississippi's wildlife and nature. Participants learn how to preserve and protect natural biology while gaining valuable education on humans' impact on the environment, water quality, ecology, and aquatic animals.

The Responsive Teen Project provides evidence-based teenage pregnancy prevention services to academically at-risk, socially at-risk, and economically disadvantaged females and males ages 13-18 through increased knowledge on STDs, HIV/AIDS, communication skills, and the development of long-term goals. Mississippi has the highest rate of teenage pregnancy in the United States.

Community Involved in Decision-Making: In order to create a true pipeline of continuum of services, SR1 conducts meetings and focus groups with school administration, faculty, staff, students, parents/guardians, researchers, and community members to custom design and develop the scope and activities for program services. SR1 also has a Community Advisory Board consisting of students (grades 6-12), parents/guardians, community members, researchers, health advisors, and institutions of higher learning. The Advisory Board is based on recommendations from the community and partners. The Advisory Board felt this project was desperately needed in Jackson, MS. The community has buy-in from the beginning and is active during the design, development, finalization, and implementation of project services.

Increased Community Capacity: SR1 has begun to offer evidence based, innovative, and efficiently-run programs that are aimed at doing nothing less than breaking the cycle of

generational issues caused for the hundreds of children, families, and citizens it serves. Students who participate in the COOL Education Project engage in year-long activities that encourage community engagement and participation. For example, in October of 2013, COOL Education Scholars and their parents participated in a Mississippi Gulf Coast cleanup project that focused on the importance of marine conservation. Additionally, SR1 staff has participated in workshops at the MS Museum of Natural Science that teaches how to incorporate environmental concepts into lessons, including how to identify safe drinking water through testing water samples. Students and families are also educated on the importance of maintain healthy lifestyles and healthy environments. SR1 also sponsors, coordinates, and participates in service projects (e.g. Breast Cancer Awareness Walk, University of Southern's Mississippi's Marine Science coastal project, Sudden Infant Death Syndrome (SIDS) Walk, etc.) throughout the year to engage and improve the targeted communities

How Applicant Has Maintained and Sustained Community Relationships: The first step in maintaining and sustaining community relationships is to gain the trust and respect of the residents. SR1 has gained the support from key community members; this assisted in facilitating trust from the larger community. From the beginning, community residents have equal input in all SR1 services. SR1 has also assembled a passionate, multi-disciplined, and diverse staff with high-level expertise to serve the public's local health issues. SR1 staff has been trained on evidence-based social science cultural competency strategies. Cultural competence is comprised of 4 components: (a) Awareness of one's own cultural worldview, (b) Attitude towards cultural differences, (c) Knowledge of different cultural practices and worldviews, and (d) Cross-cultural skills. Developing cultural competence results in the ability to understand, communicate, and effectively interact with people across cultures. Combined, the passionate staff and cultural competency trainings provide a strategy that promotes higher community resident retention in activities from the onset. SR1 has over an 85% community retention rate in all program service areas.

IV. PROJECT DESCRIPTION

SR1 has identified (1) Clean Water Act: Section 104(b) (3) as the environmental statue to address. The COOL LEAPH Project will empower the economically disadvantaged minority residents in Jackson, MS, to develop and sustain the skills needed to (1) mobilize the community to actively participate in addressing environmental and public health issues and (2) identify, understand, and address environmental health hazards and associated health hazards and Clean Water Act violations.

Goals, Objectives, & Activities to Achieve Results: The project will be guided by 3 overarching goals and their respective process objectives and activities.

Goal 1. Mobilize the community to have active participation in addressing environmental health issues and public health issues.

Process Objective 1.1 To inform the community members of Jackson, MS of environmental health issues and public health issues affecting their community.

Activities:

- Record public service announcements for the radio dissemination

- Utilize social media (SR1's Facebook and Twitter accounts) and SR1's website
- Develop culturally, linguistically, and educationally appropriate factsheets on health and environmental hazards and Disseminate to schools, beauty salons, barbershops, daycare centers (English and Spanish)
- Hold semi-annual and annual community meetings to update the community members on environmental and public health issues and project activities

Outputs Jackson, MS residents will be better informed and equipped to react to various public health and environmental hazards in their communities (e.g. residents will be trained on proper procedure when under a boil water notice).

Outcomes

- Fewer residents exposed to high toxicity in public drinking water
- Fewer residents experiencing health effects due to Clean Water Act violations

Process Objective 1.2 To guide the community members in utilizing community mobilization and environmental justice principles to address environmental health issues and public health issues.

Activities:

- Identify and recruit 10 community representatives to serve as community advocates for environmental justice
- Educate advocates on the 5 steps of community mobilization (**Phase 1: Planning for Community Mobilization; Phase 2: Awareness Raising; Phase 3: Planning Group; Phase 4: Taking Action;** and **Phase 5: Monitoring and Evaluation)** and 5 principles of environmental justice advocacy (**Principle 1:** What the community says and wants are the most important aspects; **Principle 2:** Advocacy enables communities to do more for themselves and lessens their dependency on others; **Principle 3:** Advocacy should help communities to make informed choices; **Principle 4:** Advocates should not have a conflict of interest).
- Develop an advocacy kit for community advocates

Outputs Residents will be educated and guided on how to engage in community problems regarding public health and environmental issues

Outcomes

- Residents will be empowered to participate and advocate to influence local environmental and public health legislation and policy to positively impact communities.

Goal 2. Increase community members' (students and adults) ability to identify, understand, and address environmental health hazards and associated health hazards.

Process Objective 2.1 To develop culturally, linguistically, and educationally appropriate training materials for adult community members and students.

Activities:

- Develop a curriculum promoting healthy homes to counteract adult and childhood health illnesses, morbidity, and mortality. Curriculum will provide data concerning health and environmental hazards associated with wastewater treatment violations, risk factors, symptoms, sources, prevention methods, testing methods, treatment methods, and federal, state, and local regulations and initiatives.
- Develop a curriculum providing an overview of the following: the Clean Water Act, detailed terms and conditions of the National Pollutant Discharge

Elimination System (NPDES), danger of sanitary sewer overflows, prohibited bypasses, operation and maintenance failures, and effluent limit violations, information on Jackson's injunction relief period, penalties imposed on the City of Jackson, MS, and the Clean Water Act Settlement Penalty Policy.

Outputs Increase capacity of community to recognize and understand environmental and public health hazard risks.

Outcomes

- Better understanding within community on the environmental and public health exposure risks associated with water contamination
- Fewer cases of illnesses causes from high water toxicity exposure

Process Objective 2.2 To train community members to serve as community educators in order to increase sustainability beyond project period

Activities:

- Work with faith-based organizations, community-based organizations, local educational agencies, schools, colleges, and community members to identify at least 30 community members to train as community educators. The community educators will be informed of the requirements before completing registration documents.
- Train 30 community members on the Promoting Healthy Homes curriculum and the Clean Water Act curriculum. Each training will be 1 day in length, and no more than 15 members will be trained per session. The community members will have to perform a teach-back and pass (80%) a 50-question assessment on each curriculum to become certified as community educators. They will have to conduct at least 2 community presentations based on the curriculums per year with community members to remain certified. The community educators will have to document the trainings inclusive of sign-in sheets, location of presentation, and start time. Power Point presentations based on the curriculums will be pre-developed for the community educators to use during community presentations. SR1 will provide equipment, technical support, and observation monitoring for community educators as requested. SR1 staff will monitor all community educators at least once. If needed, SR1 staff will reinforce skills with community educators.

Outputs Information regarding local environmental health hazards will be more easily attained throughout community

Outcomes

- Sustain community efforts to ensure community members have a meaningful current and future presence in addressing environmental and public health issues

Goal 3. Stimulate low-income and minority students in grades 6-12 to gain an interest and understanding of environmental health and public health.

Process Objective 3.1 To provide students in grades 6-12 with hands-on environmental health and public health activities during non-school hour programming

Activities:

- Arrange presentations/activities from environmental and/or public health professionals from state agencies and colleges such as the Mississippi Department of Environmental Quality, Mississippi State Department of Health, University of

Mississippi Medical Center, University of Southern Mississippi, and Mississippi State University
- Train students on how to take water and soil samples, prepare wet slides, view the slides under microscope, analyze the samples, and interpret results
- Assist students with developing PowerPoint presentations and provide at least 3 public opportunities for students to discuss their sampling procedures and results
- Provide opportunities for students to attend environmental health and public health laboratories and water treatment plants

Outputs Student participants gain better and more complete understand regarding environmental health hazards and risks of exposure, spurring greater interest and knowledge

Outcomes
- Participants adopt responsible and safer practices regarding environmental health hazards (e.g. what to do when under a boil water notice)
- Participants reteach information to parents/guardians, families, and peers, creating a larger informed public
- Student participants become more interested and involved in community issues and public policy

Process Objective 3.2 To guide students through a simulated environmental health/public health outbreak investigation during non-school hour programming.

Activities:
- Provide historical background related to the emergence of public health and their milestones (Worldwide, United States, Mississippi)
- Introduce and provide an understanding of key terms such as Environmental Health Specialist/Officer, Public Health Specialist/ Officer, causative agent, contributing factors, incidence rate, prevalence rate, epidemiology, and health outbreak investigations
- Using the Center for Disease Control and Prevention's public domain software, Epi info for data
- Naming and demonstrating the 10 steps of a field investigation
- Describing the process to identify the causative agent using illness characteristics
- Calculating disease rates and identifying risk factors for illness
- Fundamental understanding of the difference between a case-control design (where two groups results are identified and studied retrospectively) and a cohort study design (where a group's results are identified and studied over a future period of time)
- Reporting results and possible intervention

Outputs Student participants gain better and more complete understand regarding environmental health hazards and risks of exposure, spurring greater interest and knowledge

Outcomes
- Participants adopt responsible and safer practices regarding environmental health hazards (e.g. what to do when under a boil water notice)

- Participants reteach information to parents/guardians, families, and peers, creating a larger informed public
- Student participants become more interested and involved in community issues and public policy

TimeLine

Year 1 Timeline	**Months**											
Activities	J	J	A	S	O	N	D	J	F	M	A	M
Hire and Train Staff	X	X	X									
Order Supplies and Equipment	X	X	X	X	X	X	X	X	X	X	X	
Update Website & Social Media for Information Dissemination	X	X	X	X	X	X	X	X	X	X	X	X
Develop Factsheets, Training Materials, and Curriculum	X	X	X	X								
Identify, Recruit, & Select Community Members for Training				X	X	X						
Hold Semi-Annual and Annual Community Meetings					X							X
Disseminate Factsheets			X	X	X	X	X	X	X	X	X	X
Secure Guest Speakers		X	X	X	X							
Identify, Recruit, & Select Student Participants			X	X	X	X						
Engage Students in Environmental/Public Health Learning						X	X	X	X	X	X	X
Provide Presentation Opportunities for Students										X	X	X
Train Community Educators and Advocates							X	X	X	X	X	
Monitor Community Educators and Advocates									X	X	X	X
Programmatic and Financial Reporting						X						X
Evaluation of the Project	X	X	X	X	X	X	X	X	X	X	X	X

Collaborative Problem Solving (CPS) Model: The COOL LEAPH Project does incorporate several elements of the CPS Model. The related environmental statue was identified, a course of action developed, and proposed outcomes decided by building upon the existing partnerships and potential new partnerships in the community. Focus groups, surveys, and community meetings were vital to developing the project's vision. Based on data gathered by SR1, many community residents were not even aware of the violations, the associated environmental and public health impact, and methods to advocate on his/her community's behalf in order to work toward solutions. Capacity building workshops and trainings will be conducted to better equip the community in understanding the depth of the City of Jackson's Clean Water Act violations and to ensure the residents are better equipped in to engage in matters of local environmental

and health policies. The Community Advisory Board has bylaws that have in place. consensus building and dispute resolution policies, which are important in providing a fair field for moving toward the common goal. Furthermore, partnerships assist in leveraging resources in order to have a greater impact on the community. The 3 Memorandums Of Agreement partners for the COOL LEAPH Project include a community based organization, a private college, and a business. The partners will provide meeting space, trainers/facilitators, and transportation. SR1 has in place a sound management plan that incorporates financial management, record keeping, data management, quality assurance, and participant confidentiality.

Increase Community Capacity: The COOL LEAPH Project will build the capacity (skills, knowledge, awareness, and advocacy) of the Jackson, MS, community to address the disproportionate impact of environmental health issues and public health issues that currently negatively impact low-income residents. This will thus prevent future issues. The community's capacity will be built by employing community mobilization efforts that will result in the engagement and collaboration of all sectors of the population (local educational agencies, community based organizations, higher education representatives, policy makers and opinion leaders, local, state, and federal governments, professional groups, religious groups, businesses, and individual community members) in a community-wide effort to address and build a continuum of solutions for environmental health and public health hazards. Additionally, the developed curriculums, factsheets, trainings, community forums, dissemination and review of collected data, and studies in conjunction with other project activities will further increase the community's capacity to address environmental health issues. Community mobilization efforts and the educational trainings provided by the certified community educators will ensure sustainability beyond the project period.

Accordance With Threshold Eligibility Form: In accordance with the Threshold Eligibility Form and the activities authorized by the federal environmental statues, the COOL LEAPH Project will implement training, public education, surveys, monitoring, and research activities. The activities are approved by 1) Clean Water Act: Section 104(b) (3) and 2) Toxic Substances Control Act Section 10 (a) environmental statues.

Partner's Nature, Interest, & Sustainability: SR1 has a long existing relationship with the Mississippi SIDS Alliance. The Alliance provides training and education on reducing potential environmental hazards that contribute to unhealthy homes for low-income children and their families. The activities are aligned with MSDH's healthy homes initiative, which includes reducing childhood lead poisoning. The Alliance will provide in-kind support by assisting in providing education and outreach on environmental hazards. The relationship with the Alliance will be maintained and sustained through continued support, partnership, and cooperation among both organizations' community activities. Additionally, a staff member of the Alliance serves on SR1's Community Advisory Board.

SR1 will also partner with Millsaps College, a privately-supported college centrally located in Jackson, MS. SR1 has a well-established relationship with Millsaps College and currently partners with them to promote College Access and Success for low-income, at-risk, and first generation college attendees for students in grades 6-12. Millsaps will

provide access and support of facility space (classrooms, science laboratories, computer labs with internet service) inclusive of equipment as needed for meeting space, trainings, and community forums. Millsaps College is committed to being actively involved in the Jackson, MS, community to enhance the education, health, and socioeconomic factors that plague low-income residents of the city. SR1's work with economically disadvantaged residents has been incorporated into the college's 10-year strategic plan.

Symbiosis Investment serves as another vital partner. Symbiosis is a private business located in Madison, MS. Symbiosis and SR1 have served as partners for over 5 years. Symbiosis has provided transportation for SR1's adult and K-12 project participants for 5 years. Symbiosis is crucial to the success of the project, as many participants that we serve, do not have access to reliable transportation. SR1 and Symbiosis maintain partnership by a staff member of Symbiosis serving on SR1's Community Advisory Board.

Evaluation: The evaluation plan will include both quantitative and qualitative methods. The data collected in the evaluation process will be maintained on Microsoft ACCESS, SPSS, NVivo, and other database applications. The analysis using the Statistical Package for the Social Sciences (SPSS) 18.0 will allow the project to conduct tracking, mapping, and clustering analysis of participants. The Project's evaluation process will involve 5 steps: **(1)** Specification of the performance goals and indicators to be measured; **(2)** Specification of the sequential set of performances that, if observed, would indicate the goal has been achieved; **(3)** Identification of which performances are critical to goal attainment; **(4)** Description and specification of the indicator objectives; and **(5)** Testing of whether each indicator objective is associated with the others. It will focus on the process, short/intermediate term, long term, and final impact of the project in order to gauge project success and ongoing evaluation for modifications and enhancement.
Monitoring refers to the simple description, counting, and tracking of processes or events. Monitoring will be important for assessing if activities are executed and executed as intended, executed where and when intended, and executed to the amount intended. Monitoring will be useful for assessing adherence to and changes in policies, procedures, and protocols and for assessing progress toward achieving objectives. Our monitoring plan will allow us to identify barriers to program implementation. A host of outcomes will be monitored to determine if the logic of the project is successful in meeting its goals and objectives. Data will be collected during pre-treatment assessments, post-evaluations, participants' follow-up evaluations (6 months), and throughout the life of the project. A series of cross-tabulations and frequency distributions will compare measures and provide the basis for demographic analysis of participant data.

V. ORGANIZAIONAL CAPACITY AND PROGRAMATIC CAPABILITY

Proper and Efficient Administration: SR1 employs a sound, proven management structure that will drive the COOL Environmental Stewardship Project. SR1's management approach is flexible and allows us to respond quickly and effectively to all tasks and deliverables. Our management plan ensures the delivery of high quality technical performance by the proposed personnel and deliverables. A Management by Objectives (MBO) approach allows SR1 staff to define strategies and activities necessary

to integrate tasks, deal with issues, and enhance overall control of service delivery. MBO facilitates designation of specific tasks to each staff member, timelines for completion, and performance evaluation. MBO allows for clear lines of communication for SR1 staff on goal and objectives status through a continuous tracking of processes and feedback, thus strengthening coordination and implementation of service delivery.

Financial Management: SR1's financial management system provides the necessary financial information to accurately forecast and manage project staffing, planning, and implementation. SR1 adheres to written operational procedures in regard to accounting control based upon OMB Circular A-122. These procedures include a descriptive chart of accounts, prompt and accurate recording of revenues and expenses, safeguarding and verification of assets, 2 signatures on all checks, control over expenditures, and separation of duties to the extent possible. The review and monitoring of SR1's fiscal management is delegated to its Finance Manager with oversight from its Governing Body. SR1 uses the accrual method of accounting and ensures the segregation of restricted funds. SR1's policies and procedures require all personnel with fiscal responsibilities to partake in the up-to-date bookkeeping system training provided by SR1. Systems are in place to prevent/detect fraud or other abuse of the system. One such system includes controlling, operating, and reviewing the system by more than 1 person. SR1's accounting records are kept up-to-date and balanced on a monthly basis. Statement receipts and disbursements are reconciled to the general ledger on a monthly basis.

Data Management Resources: SR1 has the equipment resources needed to support the project's data management and information system requirements of the proposed project. The resources include high-speed Internet and a variety of licenses for software packages that will enable low-cost support for the management of information relative to the project. Computer operating systems include OSX, Windows XP, and Vista. Productivity software includes Microsoft Office for Microsoft Windows and OSX operating system. Data management and evaluation software will be housed in Windows-based programs such as Microsoft Access and SPSS 21. Additional software includes desktop publishing presentation and graphics software (Microsoft Publisher, Illustrator, Powerpoint, and Adobe Photoshop), which will be utilized to publish professional newsletters, reports, and for other marketing efforts. Other software for Web-based publishing and project management is also available.

SR1 has facilities-based hosting and e-mail server with the following qualifications: on site Linux and Windows servers and system administrator(s), backup generator in case of power failure, website statistics detailing website traffic, e-mailed weekly report of statistic summary, climate controlled environment where server is maintained, redundant DS3 lines, water-less fire prevention system, and daily tape backup of websites and databases with off-site storage.

Quality Assurance/Quality Control: The quality assurance process begins at the inception of the information development process. SR1 will review the quality (including the objectivity, utility and integrity) of the information before it is disseminated and treats information quality as integral to every step of the development of information, including

creation, collection, maintenance, and dissemination. Moreover, work produced by staff undergoes several levels of review before being finalized and disseminated to ensure quality, i.e., utility, objectivity (in substance, cultural competency, and presentation), and integrity. Reviews are both hierarchical, i.e, performed by high-level supervisors and peer experts.

Monitoring Implementation/Problem Recognition and Resolution: SR1 understands one of biggest implementation and monitoring issues that needs to be addressed in a project of this magnitude is early recognition of potential problems and a solution to the problems. SR1 uses a Management By Objective model that enables staff and members to anticipate and foresee potential problems and prepare a plan of action to alleviate all problems with no or little effect on service delivery. SR1 will also work closely with the Independent Evaluator to utilize process-monitoring evaluation data to document how progress is being made to accomplish tasks. SR1 will utilize the data collected and analyzed by the Independent Evaluator on a monthly basis to anticipate and counteract problems and issues that arise and to address overall implementation of the project. The implementation will be modified as needed based on the data.

VI. QUALIFICATIONS OF PROJECT MANAGER (PM)

Qualifications: Dorlisa Hutton MPH, MS (Project Manager), Ms. Hutton brings a unique combination of Public Health and Biomedical Science educational and research expertise. She has a Master of Public Health degree from Jackson State University (Jackson, MS) and Master of Biomedical Sciences degree from the University of Mississippi Medical Center (Jackson, MS). She has conducted extensive research on the impact environmental and public health issues have on low-income populations and the lack of minority and low-income students interested in pursuing post-secondary majors and career choices related to eradicating these issues. She has over 7 years of experience managing multi-million dollar projects that focus on eliminating health and education disparities affecting low-income minorities in Jackson, MS. Ms. Hutton has a wealth of knowledge in managing the day-to-day implementation of projects inclusive of empowering and building the capacity communities, curriculum development, report writing, protocol development, and monitoring compliance with program guidance service delivery, quality assurance, data collection, and staff supervision.

Ties: Ms. Hutton is a native and lifelong resident of Jackson, MS. She understands the rich, complex, and unique cultures of the low-income population of Jackson, MS, as she herself grew up impoverished and still has strong community ties with the target population. She is well-known and respected throughout the communities for her cultural competent, age-appropriate service delivery of environmental and public health focused projects that provide outreach, education, training, capacity-building assistance, and technical assistance to community members, parents, students, school faculty and staff, and public health and social support professionals. Ms. Hutton has a firm understanding of the social, economic, and cultural attitudes and perspectives of the proposed communities, which will greatly ensure community buy-in and support for the proposed COOL LEAPH Project. Also, Ms. Hutton's professional connections with state agencies, local agencies, and community-based agencies will assist in bridging the gap between the low-income residents and the environmental and public health professionals.

Activities: Ms. Hutton has proficiency in providing outreach, technical assistance, and capacity-building assistance services via skills building trainings, information transfer, technical services and consultation, and technology transfer to health departments, community members, community-based organizations and faith-based organizations on topics such as cultural competency, needs assessments, program evaluation, and social marketing. She has provided environmental and public health service delivery to low-income populations in the areas of childhood lead poisoning prevention, asthma, mold, drinking water containments and the maximum containment levels, carbon monoxide, green energy, teenage pregnancy prevention, and advocacy development by utilizing evidenced-based methods and rigorous curricula. Moreover, Ms. Hutton has assisted low-income residents and community-based organizations in community mapping, health impact, resource inventory, and service gap analysis activities. Ms. Hutton is a certified childhood lead prevention trainer, childhood lead screener, health homes trainer, and teenage pregnancy prevention trainer-of-trainers.

VII. Past Performance in Reporting on Outputs and Outcomes

SR1 has not received federal funds directly from a federal agency. The most relevant community focused projects are:

1. **Grant or Cooperative Number:** C511-6250
   Title of Project: Community Oriented Opportunities for Learning (COOL) Jackson Project **Amount of Funding:** $2.3 million
   Funding Agency/Organization: Mississippi Department of Education
   Point of Contact: Karen Austin; 601-359-3499 (Phone)
2. **Grant or Cooperative Number:** 13AFHMS0010003
   Title of Project: Community Oriented Opportunities for Learning (COOL) Education Project
   Amount of Funding: $235,007
   Funding Agency/Organization: Mississippi Commission of Volunteer Services/Corporation for National and Community Service
   Point of Contact: Judy Stein; 601-432-6224 (Phone)

Documentation of Outcomes/Outputs: SR1 has met and exceeds required grant outcomes and outputs both programmatic and financially. Programmatic success has been documented via outreach logs, sign-in/sign-out forms, registrations forms, completion certificates, pre-post test assessments, focus groups, case files, screening forms, and surveys. Data is collected utilizing valid and reliable instruments and then analyzed. Results are reported by written reports and online grantor data reporting systems. Financial results are documented using OMB Circular A-122 principles and are reported to grantors via written financial reports. SR1 utilizes an external evaluator for all project activities.

VIII. Quality Assurance Project Plan Information

SR1's Quality Plan will review the quality (including the objectivity, utility and integrity) of the information before it is disseminated. Reviews are both hierarchical, i.e, performed by high level supervisors and managers and by peer experts.